



REPUBLIC OF ZAMBIA

1.0 Background

This document presents a revised and updated Nationally Determined Contribution (NDC) for Zambia to the Paris Agreement on climate change. This is pursuant to Decision 1/CP.19, 1/CP.20 and 1/CP.21 of the Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC) for countries to enhance their climate ambitions and update their Nationally Determined Contributions by 2020.

Zambia's first NDC was submitted on 9th December, 2016, and consisted of both mitigation and adaptation components based on the country's national circumstances. This NDC was submitted with a conditional pledge of reducing Greenhouse Gas (GHG) emissions by 25% (20,000 Gg CO₂ eq.) by 2030 against a base year of 2010 under the Business As Usual (BAU) scenario with limited international support¹ or by 47% (38,000 Gg CO₂ eq.) with substantial international support². The mitigation actions were focused on three programmes:

- (1) Sustainable forest management;
- (2) Sustainable agriculture, and;
- (3) Renewable energy and energy efficiency.

Adaptation actions in this NDC were focused on strategic productive systems (agriculture, wildlife and water), strategic infrastructure and health systems and enhanced capacity building, research, technology transfer and finance for adaptation. The country requires substantial resources to meet the means of implementation of these interventions.

By this submission Zambia enhances its NDC by broadening the scope of sectors under mitigation by adding transport, liquid waste and coal (production, transportation and consumption) and by elaborating the adaptation component of the NDC by developing indicators that will enable the country track progress on building resilience in both the human and physical systems and on adaptation actions.

1.1 Further information necessary for clarity, transparency and understanding (ICTU) of Zambia's NDC.

Zambia has used the guidance on information to provide clarity, transparency and understanding in Decision 4/CMA.1 for information provided in the Annex to this submission, as applicable to its NDC.

¹ Limited international support means the domestic resources that the country is able to mobilise including the prevailing international resources (Business as Usual resources) that the country was receiving as of 2015 and estimated at USD \$ 15 Billion.

² Substantial international support means adequate international resources, both bilateral and multilateral support estimated at USD \$ 35 Billion.

2.0 Annex 1

Nationally Determined Contribution (NDC) of Zambia for the timeframe 2015-2030

Updated as of 30th July 2021

Zambia intends to reduce its greenhouse gas emissions by 25% (at Business As Usual (BAU) level of international support prevailing in 2015) and towards 47% (with substantial international support) compared to 2010 levels.

Information necessary for clarity, transparency and understanding (ICTU) of Zambia's NDC

Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Zambia's NDC
1	<i>Quantifiable information on the reference point (including, as appropriate, a base year):</i>	
(a)	Reference year(s), base year(s), reference period(s) or other starting point(s);	Base year: 2010
(b)	Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year;	The reference indicator has been quantified based on national total greenhouse gas (GHG) emissions with 2010 as the base year. The base year emission level was 120,604 Gg CO ₂ -equivalents. ³

³ The emission reduction targets of 25% with limited international support and 47% with substantial international support was calculated based on the 1996 IPCC guidelines, however there has been a recalculation using the 2006 IPCC guidelines in the Third National Communication and the First Biennial Update Report which resulted in a base year emission level of 120,604 Gg CO₂ equivalents.

(c)	<p>For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or policies and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, Parties to provide other relevant information;</p>	<p>Zambia prepared Nationally Appropriate Mitigation Actions (NAMAs) on small hydro, sustainable agriculture, and sustainable transport, integrated waste management, and sustainable charcoal production. The NAMAs were submitted to the UNFCCC NAMA registry in 2016. Further a National REDD+ Strategy and its Investment Plan were developed in 2017. Zambia also prepared the Technology Needs Assessment for both adaptation and mitigation in 2013.</p>
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(d)	Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction;	At least 25% (20,000 Gg CO ₂ eq.) by 2030 against a base year of 2010 under the business as usual scenario with limited international support or By 47% (38,000 Gg CO ₂ eq.) with substantial international support.
(e)	Information on sources of data used in quantifying the reference point(s);	Sources of information include; Zambia's Biennial Update Report and Third National Communication submitted to UNFCCC Secretariat in 2020.
(f)	Information on the circumstances under which the Party may update the values of the reference indicators.	The value of the reference indicator has been updated due to the fact that GHG emissions have been recalculated as a result of change of methodologies. In the initial NDC, reference emissions were estimated using the IPCC 1996 Guidelines whereas in the revised NDC IPCC 2006 Guidelines were used.
2	Time frames and/or periods for implementation:	
(a)	Time frame and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA);	From 1 st January 2015 – 31 st December 2030
(b)	Whether it is a single-year or multi-year target, as applicable.	Single-year target in 2030.

3	Scope and coverage:	
(a)	General description of the target;	This NDC is submitted with a conditional pledge of reducing Greenhouse Gas (GHG) emissions by 25% (20,000 Gg CO ₂ eq.) by 2030 against a base year of 2010 under the BAU scenario with levels of international support prevailing in 2015 or by 47% (38,000 Gg CO ₂ eq.) with substantial international support.
(b)	Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines;	<p>Information provided in this NDC is consistent with the IPCC guidelines:</p> <p><u>Sectors</u></p> <ol style="list-style-type: none"> 1. Energy-categories include; Energy industries, manufacturing industries and construction, transport, and other sectors 2. Agriculture Forestry and Other Land Use (AFOLU)-categories include; livestock, Land and Aggregate sources and non-CO₂ emissions sources on land 3. Waste-categories include; solid waste disposal, biological treatment of solid waste, Incineration and Open Burning of Waste, and Wastewater Treatment and Discharge. <p>These sectors were selected because they are key categories and emerging sectors that are contributing to the emission profile of the country.</p> <p><u>Gases</u></p> <p>Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O),</p>

(c)	<p>How the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21</p> <p>Para. 31(c) “Parties strive to include all categories of anthropogenic emissions or removals in their nationally determined contributions and, once a source, sink or activity is included, continue to include it”</p> <p>31(d) “Parties shall provide an explanation of why any categories of anthropogenic emissions or removals are excluded”</p>	<p>Zambia enhances its Nationally Determined Contribution by broadening the scope of sectors under mitigation by adding transport, liquid waste and coal (production, transportation and consumption), translating into three additional categories. This translates into additional three categories.</p> <p>Zambia demonstrates it has enhanced its NDC by broadening the scope of sectors which contribute to the country’s mitigation efforts. Industrial Processes and Product Use is not included in the NDC due to relatively very low emissions and mitigation potential. In the subsequent submissions, Zambia will endeavour to consider all sectors and categories as potential contributors to its mitigation efforts.</p> <p>Zambia has focussed its efforts on sectors with the greatest mitigation potential, with the greatest likelihood of rapid implementation, aligned where possible with the GHG inventory Key Category Analysis, as the country progressively moves towards an economy wide approach.</p>
(d)	<p>Mitigation co-benefits resulting from Parties’ adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties’ adaptation actions and/or economic diversification plans.</p>	<p><u>Mitigation co-benefits resulting from Parties’ adaptation actions</u> Zambia has identified several mitigation benefits from adaptation actions including under Climate Smart Agriculture and sustainable forest management where adaptation measures have also resulted in substantial emissions reductions</p>
(e)	<p>Sectoral targets</p>	<p>A quantitative analysis of sectoral targets has not yet been undertaken and therefore sectoral targets have not been considered in this submission. These will be undertaken once resources and information are available.</p>
4	<p>Planning processes:</p>	

(a)	<p>Information on the planning processes that the Party undertook to prepare its nationally determined contribution and, if available, on the Party's implementation plans, including, as appropriate:</p>	<p>The mitigation and adaptation programs elaborated in this NDC are integrated in the Seventh National Development Plan (7NDP) – 2017 to 2021 and its successive plans.</p> <p>Planning for adaptation and mitigation programs under the Zambia's NDC. The National Adaptation Planning process being undertaken by Government provides a good basis for long term adaptation programming and mainstreaming of climate change adaptation into the national planning and budgeting processes.</p> <p>The National Designated Authority (NDA) for the Green Climate Fund has already been designated and is expected to play a key role of “clearing house or entity” for climate change projects to be funded from GCF in Zambia.</p> <p>The Development Bank of Zambia was recently accredited as the National Implementing Entity (NIE) for Direct Access under the Green Climate Fund (GCF) and Zambia is in the process of establishing a National Climate Change Fund (NCCF).</p> <p>The preparation of the NDC was done with broad stakeholder participation with all stakeholders including Government institutions, civil society, private sector and sub-national stakeholders consulted, while ensuring gender balance in the process</p> <p>The effectiveness of the NDC implementation will be ensured through the ongoing development and strengthening of Implementation Framework and Monitoring Reporting and Verification (MRV) systems to track progress of implementation of both the mitigation and adaptation programs.</p>
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<p>(i)</p>	<p>Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner;</p>	<p>Institutional arrangements: The Institutional arrangements for climate change implementation is established in the National Policy on Climate Change of 2016 through an inter-ministerial coordination structure.</p> <p>The Policy establishes the Council of Ministers chaired by the Vice President of the country, which is the supreme decision making body in overseeing Climate Change interventions in the country. It provides policy guidance on climate change programming, mainstreaming, resource mobilization, monitoring and evaluation.</p> <p>The Steering Committee of Permanent Secretaries is the advisory body to the Council of Ministers on policy and programme coordination and implementation. The Steering Committee is chaired by the ministry responsible for development planning to ensure climate change is mainstreamed in the development planning process.</p> <p>The Technical Committee on Climate Change comprises representatives from relevant Ministries and a broad range of other stakeholders, including private sector, civil society, financial institutions, among others. The Technical Committee is the main technical advisory body to the Steering Committee of Permanent Secretaries. The Technical Committee is chaired by the Ministry responsible for Climate Change implementation under which there is a dedicated department on climate change which is responsible for coordinating climate change implementation in Zambia.</p> <p>Sub-National structures to coordinate climate change implementation at the sub-national level.</p>
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<p>(ii)</p> <p>a.</p>	<p>Contextual matters, including, inter alia, as appropriate:</p> <p>National circumstances, such as geography, climate, economy, sustainable development and poverty eradication;</p>	<p>a.) Zambia has a total surface area of 752,614 km² out of which 99 percent is made up of land area and 1percent is covered by water. The country’s population was estimated at 13,092,666 in 2010 with approximately 60.5 percent living in rural areas and 39.5 percent lived in urban areas. The population growth rate was approximately 2.8 percent.</p> <p>In 2010, Zambia’s Gross Domestic Product (GDP) grew by 7.6 percent compared to 3.5 percent in 2000. This economic growth rate was largely driven by agriculture, infrastructure developments including increased metal production following a rebound in copper prices on international markets and provision of various tax incentives in the agricultural and mining sectors. Zambia’s agricultural sector is the socio-economic backbone of the rural population, with 60 percent being dependent on the sector as the main source of income and livelihood. Many of the farmers are poor and engage in low-productivity rain-fed subsistence farming resulting from inadequate resources for the purchase of inputs, use of inappropriate farming practices and failure to fully develop the irrigation potential. These challenges are exacerbated by increased frequency of extreme weather events such as rainfall variation, floods and droughts caused by climate change, and in the last two years, effects of the Covid pandemic.</p> <p>About one sixth of the rural population depends heavily on forests and non-forest resources for their livelihood and contribute approximately 20 percent to rural household incomes. However, charcoal and fuel wood production including clearance of forest land for agriculture and settlement expansion has resulted in high rates of deforestation and increased greenhouse gas emissions. The country’s annual deforestation rate was estimated at 276,021 hectares per annum.</p> <p>It has been projected that climate change impacts could slow the development process of the country and could cost Zambia approximately USD \$13.8 billion loss in GDP. In order to prevent economic losses resulting from impacts of climate change, the Government of Zambia (GRZ) has integrated climate change concerns in its policies, programmes, plans and strategies to support a low carbon and climate-resilient development pathway and the attainment of the middle-income status envisioned in the country’s Vision 2030.</p>
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<p>b.</p> <p>c.</p>	<p>Best practices and experience related to the preparation of the nationally determined contribution;</p> <p>Other contextual aspirations and priorities acknowledged when joining the Paris Agreement</p>	<p>b. The multisectoral institutional framework for coordinating climate change which is described under Section 4 (a) (i) in this document is a good practice. For handling a cross cutting issue like climate change</p> <p>c. Zambia aspires to become a prosperous low carbon and climate resilient middle income country by 2030 as enshrined in its Vision 2030.</p>
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c.	<p>Other contextual aspirations and priorities acknowledged when joining the Paris Agreement - continued.</p>	<p><i>Food security:</i> Zambia's role in global food security in the context of climate change is to adapt to a changing climate, manage and use these resources sustainably, to secure food supplies while reducing greenhouse gas emissions.</p> <p><i>Gender equality:</i> In 2018, the Government Republic of Zambia developed and launched a Climate Change Gender Action Plan (CCGAP) which is used to ensure that Zambia's climate change processes are gender-transformative and guarantee that women and men can have access to, participate in, and benefit equally from climate change initiatives.</p> <p><i>Youth Participation:</i></p> <p>Zambia has put in place a National Youth Policy which provides for strategies and programs for youth participation in the development agenda. A National Climate Change Learning Strategy was developed in 2020 to strengthen individual and institutional systemic capacities of the energy, forestry, health, agriculture and education sectors to enable them to deliver climate change.</p> <p><i>Sustainable Development Goals (SDGs):</i></p> <p>Zambia's National Development Plan (7NDP) of 2017 to 2021 has embraced an integrated multi-sectoral approach. The country has domesticated the SDGs, the African Union Agenda 2063, among others, into its 7NDP. The 7NDP has mainstreamed 86% of SDGs goals and targets. Consequently, implementation and reporting on SDGs are coordinated through the institutional structures at national and sub-national levels using the Multisectoral approach. This approach is likely to be replicated in the country's 8NDP to run from 2022 to 2026.</p>
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<p>(b)</p>	<p>Specific information applicable to Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement;</p>	<p>Not applicable</p>
<p>(c)</p>	<p>How the Party’s preparation of its nationally determined contribution has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement;</p>	<p>Not applicable as this NDC was prepared in 2020/21 before the Global Stock Take in 2023</p>

<p>(d)</p>	<p>Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on:</p>	<p>The intended contribution on adaptation stated here is for the purposes of information so that an overview of the range of planned climate-related actions of the country is made known; it does not constitute an international obligation to the country. The extent of implementation of the intended contribution is contingent upon the financial resources, capacity and technologies available to the country through both domestic and international support to stimulate investments and innovation.</p>
<p>(i)</p>	<p>How the economic and social consequences of response measures have been considered in developing the nationally determined contribution;</p>	<p>(i) As one of the least contributors to global GHG emissions, Zambia places significant importance and priority on adaptation to the effects of climate change in order to enhance the resilience of its population, ecosystems, infrastructure, productive and health systems. The key socio-economic sectors identified as most vulnerable to climate change impacts include: agriculture, water, forestry, energy, wildlife, infrastructure and health. All the adaptation actions have strong synergies with mitigation actions.</p>
<p>(ii)</p>	<p>Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectors</p>	<p>(ii) In terms of implementation, Zambia will take a landscape approach at watershed level to enhance synergies between adaptation and mitigation actions. Zambia has six major watersheds: Tanganyika; Luapula; Chambeshi; Luangwa; Kafue; and Zambezi.</p> <p>The adaptation measures comprise three (3) goals/programs and 13 priority actions, which will also result in mitigation co benefits. The programs include:</p> <p><i>Program 1: Adaptation of strategic productive systems (agriculture, wildlife, water)</i></p> <p>Which include: 1. Guaranteed food security through diversification and promotion of Climate Smart Agricultural (CSA) practices for crop, livestock and fisheries production including conservation of germplasm for land races and their wild relatives.</p>

	<p>such as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries.</p>	<p>2. Develop a National Wildlife Adaptation Strategy and ensure its implementation through supportive policies, local community, civil society and private sector participation.</p> <p>3. Protection and conservation of water catchment areas and enhanced investment in water capture, storage and transfer (linked to agriculture, energy, ecological, industrial and domestic use purposes) in selected watersheds.</p> <p><i>Program 2: Adaptation of strategic infrastructure and health systems</i> Which include:</p> <ol style="list-style-type: none"> 1. Institutionalize integrated land use planning compatible with sustainable management of natural resources and infrastructure development 2. Mainstream climate change in the National Health Policy, Environmental Health (EH) Policy, and Water and Sanitation Policy. 3. Enhance decentralized climate information services for early warning and long-term projections on the effects of climate change to support sustainable management of the production systems, infrastructure development and public health. <p><i>Program 3: Enhanced capacity building, research, technology transfer and finance for adaptation</i> Which include:</p> <ol style="list-style-type: none"> 1. Capacity building in Climate Smart Agriculture (CSA), Sustainable Forest Management (SFM), Sustainable Fisheries and Aquaculture (SFA), Renewable Energy Technologies (RET), and Early Warning Systems (EWS), Change management and climate change planning. 2. Water technologies for savings, recycling, irrigation and sustainable management for household, agriculture and industrial purposes. 3. Development of an insurance market against climate change induced risks related to
(e)	Adaptation	<p>An In-depth countrywide Vulnerability Assessment was conducted in 2020 to provide an assessment and analysis of the effect of dry spells, floods and pest infestation on different sectors in order to understand their impacts on sector performance and recommend required actions for response, rehabilitation and recovery. It outlines recommendations for the following sectors: Agriculture and food security; Health; Nutrition; Water, Sanitation and Hygiene; Education; and Development Project and Safety net programmes being implemented in communities.</p> <p>Preliminary indicators for tracking progress on adaptation are provided in Annex 2.</p>

5	Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:	
(a)	Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA;	<p>Zambia used IPCC 2006 guidelines for both the Third National Communication (TNC) and the Biennial Update Report (BUR). All the categories were included in the baseline emissions in the NDC. The country will at the latest by 31 December 2024 report a GHG inventory in accordance with 18/CMA.1 and report on progress towards its nationally determined contribution. For accounting relevant information, Zambia will use the accounting guidance in 4/CMA.1. For IPCC methodologies and metrics, see 5 (d).</p> <p>Final accounting towards the target, that will take place in 2032, may depend on resource availability. Zambia will also participate in market based mechanisms on emission reductions.</p>
(b)	Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution;	Not applicable.

(c)	If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement,	Zambia's current GHG inventory is in accordance with decision 24/CP.19 and hence the country will use IPCC 2006 Guidelines.
(d)	IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals;	IPCC 2006 guidelines was used for estimating GHG emissions and removals. Global warming potentials (GWP) for a 100 year time horizon from the IPCCs Second Assessment Report was used to calculate CO2 equivalents for Third National Communications and Biennial Update Report(BUR).
(e)	Sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable:	
(i)	Approach to addressing emissions and subsequent removals from natural disturbances on managed lands;	Disturbances have been identified as areas affected by late burning for various reasons such as use of fire for land preparation ⁴ . Early burning has been classified as a management practice. The two burning regimes are normally conducted from May-July and August-October for both early burning and late burning respectively.
(ii)	Approach used to account for emissions and removals from harvested wood products;	Not Estimated but will be undertaken once resources and information is available.
(iii)	Approach used to address the effects of age-class structure in forests;	Emissions and removals in managed forests in the period 2021 – 2030 will be accounted for as the deviation from a projected forward-looking forest reference level, with regards to dynamic age-related forests characteristics.
(f.)	Other assumptions and methodological approaches used for understanding the nationally determined contribution and, if applicable, estimating corresponding emissions and removals, including:	

⁴ GRZ 2015: Zambia National Strategy to Reduce Emissions from Deforestation and Forest Degradation

<p>(i)</p>	<p>How the reference indicators, baseline(s) and/or reference level(s), including, where applicable, sector-, category- or activity-specific reference levels, are constructed, including, for example, key parameters, assumptions, definitions, methodologies, data sources and models used;</p>	<p>Tier 2 method was employed for Land subcategory under AFOLU while Tier 1 was used for the remaining subcategories under AFOLU.</p> <p>The baseline projection for all sub-sectors under the Stationary Energy sector was calculated through the following steps:</p> <ol style="list-style-type: none"> 1. Applying a GDP growth rate to 2050. 2. Assuming this GDP growth rate percentage will reach the average of 2.74% (Trading Economics, 2021) in 2030, and will reach the same levels as the EU today in 2050 (EC, 2020). 3. This equates to a growth rate of 3% pa up to 2030 and then a lower growth rate of 2.8% pa for the years 2030-2050. <p>A baseline projection for transport was calculated through the following steps:</p> <ol style="list-style-type: none"> 1. An assumption was made that the percent of Zambia's total emissions attributed to freight will reach current levels average levels in the SADC region (scaled by population) in 2050. 2. The annual growth rates required for this transition were then calculated. 3. This growth rate (8.85% pa) was then applied to the 2016 inventory emissions and projected out to 2050. <p>A baseline projection for forest land was calculated through the following steps:</p> <ol style="list-style-type: none"> 1. The net CO₂ emissions are the sum of the emissions and removals. Here, we use the current deforestation rate of 0.7% (Government of the Republic of Zambia, 2020b) to project forward the changes in a) emissions and b) removals. <p>A baseline projection for cropland was calculated by:</p> <ol style="list-style-type: none"> 1. Using a population growth rate to determine the projected CO₂ emissions. By using a population growth rate of 2.9% up to 2030 and then a lower growth rate of 2.48% for the period of 2030-2050. Population data was obtained from Worldometer (2021) <p>A baseline projection for waste was calculated:</p> <ul style="list-style-type: none"> - For solid waste, assuming that the currently low amount of waste generation per capita increases with GDP and that total amount of waste increases with population. Furthermore, assuming that the currently low rate of collection and landfilling of waste increases up to 80% by 2050.
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(ii)	For Parties with nationally determined contributions that contain non greenhouse-gas components, information on	Not applicable. -
(iii)	For climate forcers included in nationally determined contributions not covered by IPCC guidelines,	For precursor emissions estimates, the European Environment Agency EMEP/EEA air pollutant emission inventory guidebook 2019 was used.
(iv)	Further technical information, as necessary;	Not applicable.

(g)	The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable.	Zambia intends to use voluntary cooperation under Article 6 of the Paris Agreement to fulfil part of its contribution
6	How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances:	
(a)	How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances;	<p>Zambia considers the updated NDC as fair and ambitious enough to contribute to low carbon and climate resilient economy by 2030 in accordance with its national circumstance and desire to become a low carbon and climate resilient middle income and prosperous country by 2030. Zambia is a low contributor to the global greenhouse gas emission. In developing the NDC, Zambia considered the general principles and provisions of the Convention and the Paris Agreement, especially those related to Common But Differentiated Responsibilities and Respective Capabilities (CBDR) and equitable access to atmospheric space.</p> <p>The country's NDC is guided by the country's desire to reduce poverty, address the challenges of COVID 19, attainment of low carbon and climate resilient economy through sustainable development and become a middle income and prosperous nation by 2030 in line with the country's Vision 2030.</p> <p>The successful implementation of Zambia's NDC is conditional and dependent on the level of support to be provided through the Convention and other multilateral and bilateral arrangements.</p>

(b)	Fairness considerations, including reflecting on equity;	Zambia regards its NDC to represent its fair share of the efforts to achieve the global long-term goal of the Paris Agreement as emission reductions of 25% and 47% conditional and non conditional pledges are very ambitious, taking into account country's national circumstances
(c)	How the Party has addressed Article 4, paragraph 3, of the Paris Agreement;	Zambia's updated and revised nationally determined contribution represents a progression beyond its previously communicated nationally determined contribution, as it broadens the scope of sectors under mitigation by adding transport, liquid waste and coal (production, transportation and consumption) and elaborates the adaptation component of the NDC by developing indicators that will enable the country track progress on building resilience in both the human and physical systems.
(d)	How the Party has addressed Article 4, paragraph 4, of the Paris Agreement	Not applicable.
(e)	How the Party has addressed Article 4, paragraph 6, of the Paris Agreement.	Although Zambia is an LDC and could have prepared and communicate strategy, plan and actions for low greenhouse gas emissions development reflecting its special circumstances in line with Article 4 paragraph 6 of the Paris Agreement, the country opted to prepare a full-fledged NDC as a demonstration of its ambitious efforts to contribute to global effort
7	How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2:	
(a)	How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article	Zambia's revised and updated NDC will result in substantial reduction of its emissions and thereby contribute to achieving to the objective of the Convention as set out in Article 2.
b)	How the nationally determined contribution contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement	By reducing Zambia's emissions, this NDC contributes to the global goal to strengthen response in addressing climate change

Annex 2 Indicators for Adaptation

No.	Indicator	Baseline in 2020	Desired Status by 2030	Actual Status in 2030
1.	Level of Resilience of natural or physical systems achieved	low	high	
2.	Level of adaptive capacity of human system attained	low	high	
3.	Level of knowledge base for adaptation planning and response	medium	high	
4.	Level of capacity of human resource base for addressing climate change	low	high	